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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,134	07/08/2003	Kenichi Sakamoto	501.37526CX1	5988

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EXAMINER	
LEVITAN, DMITRY	

ART UNIT	PAPER NUMBER
2662	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/614,134	SAKAMOTO ET AL.	
	Examiner	Art Unit	
	Dmitry Levitan	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 2-23 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 2-23 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 11 January 2005 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Amendment, filed 01/11/05, has been entered. Claims 2-23 remain pending.

Drawings

1. The drawings were received on 01/11/05. These drawings are approved, however the corrected drawings appear to be informal. If this is the case, when application is allowed, applicant will be required to submit new formal drawings.

2. In light of Applicant's amendment, the objection to the drawings has been withdrawn.

Claim Objections

3. Claim 20 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 20 is identical to the parent claim 16, therefore failing to further limit the subject matter of a previous claim.

Claim Rejections - 35 USC § 112

4. Claims 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the index" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. Claims 2-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCloghrie (US 6,035,105) in view of Chen (US 6,392,997).

6. Regarding claims 2, 6 and 10, McCloghrie substantially teaches the limitations of claims: A packet communication apparatus, method and system to transmit a packet from a first network to a second network (LAN switch 103 and two networks 102 on Fig. 1 and 2:33-49), wherein the packet includes address (inherently part of any packet, because an address is essential for packet routing) and a first header (packet inherently comprise a header, because all packets/frames have headers, including tag 107 on Fig. 1 and 4:66-67, 5:1-6) used to compose a closed network in the first network comprising:

A packet generating unit/router which generates a second header used to compose a closed network in the second network based on the address and information in the first header (LAN switch 103 on Fig. 1 and 3:7-14 generating a second header by changing tag 107 as shown on Fig. 2 and 3:49-67); and

A transmitter which transmits a packet having thereto said second header (LAN switch 103 on Fig. 1 and 3:7-14).

McCloghrie teaches the packet with MAC address (4:33-44).

McCloghrie does not teach the packet includes IP address.

Chen teaches the packet includes IP address (4:25-30 and 5:2-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add use of IP address of Chen to the system of McCloghrie to improve the system compatibility with networks based on widely used standard (IP).

In addition, regarding claim 6, McCloghrie teaches receiving the packet (3:7-14).

7. Regarding claims 3, 7 and 11, McCloghrie teaches replacing the first header with the second header (3:11-14).

8. Regarding claims 4, 8 and 12, McCloghrie teaches a route decision processing unit (LAN switch 103) which routes the packet to the second network according to address (MAC address 4:33-44) and information in the first header (tag 107 4:62-64) using IP address of Chen instead of MAC address, as shown above.

9. Regarding claims 5 and 9, McCloghrie substantially teaches the limitations of the parent claims 2 and 4.

McCloghrie does not teach packet as IP packet.

Chen teaches IP packets (4:25-30 and 5:2-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use of IP packets of Chen in the system of McCloghrie to improve the system compatibility with networks based on widely used standard (IP).

10. Regarding claims 13, 16, 17, 20 and 21, McCloghrie substantially teaches the limitations of claims:

A packet communication apparatus, method and system to transmit a packet from a first network to a second network (LAN switch 103 and two networks 102 on Fig. 1 2:33-49), wherein the packet includes address (inherently part of any packet, because an address is essential for packet

routing) and a first header (packet inherently comprise a header, because all packets/frames have headers, including tag 107 on Fig. 1 and 4:66-67, 5:1-6) used to compose a closed network in the first network comprising:

An index generating unit/router which generates a second header used to compose a closed network in the second network based on the index (LAN switch 103 on Fig. 1 and 3:7-14 generating a second header by changing index/tag 107 as shown on Fig. 2 and 3:49-67, based on the index/tag in table 206 as shown on Fig. 2 and 5:2-33); and

A transmitter which transmits a packet having thereto said second header (LAN switch 103 on Fig. 1 and 3:7-14).

McCloghrie teaches the packet with MAC address (4:33-44).

McCloghrie does not teach the packet as IP packet that includes IP address.

Chen teaches IP packets with IP address (4:25-30 and 5:2-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add use of IP packet/address of Chen to the system of McCloghrie to improve the system compatibility with networks based on widely used standard (IP).

11. Regarding claims 15, 19 and 23, McCloghrie teaches a route decision processing unit (LAN switch 103) which routes the packet to the second network according to address (MAC address 4:33-44) and information in the first header (tag 107 4:62-64) using IP address of Chen instead of MAC address, as shown above.

12. Regarding claims 14, 18 and 22, McCloghrie teaches replacing the index with a second header (removing an identifier/tag of the first network with appropriate encapsulation/header and identifier for the second network 1:66-67 and 2:1-6).

Response to Arguments

13. Applicant's arguments filed 01/11/05 have been fully considered but they are not persuasive.

On page 9 of the Response, Applicant argues that McCloghrie does not teach generating a second header based on IP address and the information in the first header.

Examiner respectfully disagrees.

McCloghrie teaches adding the second network encapsulation/generating new header, based on virtual LAN identifier/tag and inherently the address of the first header (1:62-67 and 2:1-8). Address of the first header is essential for routing the packet in second network, because this address is the only information on the packet destination.

Virtual LAN identifier/tag is essential for routing the packet in second network, because the identifier/tag segregates the packets belonging to the particular virtual LAN from the other and make possible routing the packet through multiple networks belonging to the same virtual LAN.

Chen teaches using IP packets, inherently with IP addresses, added to the system of McCloghrie.

On page 10 of the Response, Applicant argues that tag of McCloghrie is not a header.

Examiner respectfully disagrees.

Identifier/tag of McCloghrie is definitely part of the packet header, because in all packet systems, tags, identifiers or indexes are always added to the packet header, not to the part of the packet containing data.

So, Examiner believes, that changing a tag in the packet header is new header generation. In addition, McCloghrie teaches adding the second network encapsulation in his system.

On page 11 of the Response, Applicant argues that the present invention is superior to the system of McCloghrie and Chen.

Examiner believes that these arguments are irrelevant, as the advantages are not directly claimed.

Examiner therefore believes that the cited references meet all the claims limitations and the rejection is proper.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DL

Dmitry Levitan
Patent Examiner.
04/14/05.

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